



# Instructions for the safe use of Flints D Ring and Keeper

**The information in this leaflet should be passed to  
the user of the equipment**

This document is issued in accordance with the requirements of Section 6 of the Health and Safety at Work Act 1974, amended March 1988.

These instructions apply to Flints D Ring and Keeper with  
Codes FHS092K and FHS092DR  
**Working Load Limit 100kg**

## Use for which the article is designed

Flints D Ring and Keepers have been designed for the flying at an angle to the axis of the keeper of conventional timber scenery in the indoor theatre environment. It is assumed the fittings are attached to scenery flown on standard theatre counterweight or hemp systems or power flying systems fitted with soft starts. The use of the fittings for any other purpose would be inappropriate. The fittings should be attached to the scenery by a competent person familiar with the theatre environment.

## Always

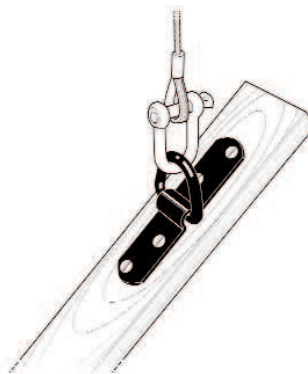
- ✓ Store the fittings in a area which is dry, clean and protected from corrosion.
- ✓ Inspect the fittings before putting into use or before being placed into storage. Any fittings found to be faulty should be marked as such and taken out of service and destroyed.
- ✓ Ensure fittings are selected and fitted by a competent person.
- ✓ Ensure the fittings are used in such a way that the failure of any one fitting would not lead to a dangerous situation.
- ✓ Ensure any fitting subjected to excessive load by way of shock loading or any other means is immediately removed from service and marked for destruction.
- ✓ Follow the fitting instructions with regard to fittings and timber thickness.
- ✓ Ensure the load is applied in the direction as stated in the instructions.
- ✓ Ensure the fittings are thoroughly inspected by a competent person at six monthly intervals or after any exception circumstance or according to an examination scheme.
- ✓ Individually mark the fittings and record their details together with the EC Declaration of Conformity.

## Never

- ✗ Exceed the working load limit.
- ✗ Subject fittings to shock loads.
- ✗ Never use a fitting which is bent, modified in an unapproved manner, stretched, has nicks, gouges or cracks, has signs of heat or burning, or signs of corrosion.
- ✗ Apply a load without ensuring any shackles or rigging screws are correctly aligned.

## Selection of Correct Fitting

Select Flints D Ring and Keeper (FHS092K and FHS092DR) for flying conventional timber scenery which may need to be positioned at an angle.



## Correct Fitting

D Rings and keepers may be positioned at any strong point on the scenery so long as the angle of the pull is along the axis of the keeper. The Keeper must be bolted to the timber using four 5mm diameter countersunk machine screws and tee nuts. The finished thickness of the timber must be at

least 20mm. The width of the timber should be at least 70mm in order to achieve the working load limit. The timber should be of best joinery quality and inspected to ensure it is free from defects such as knots or shakes. The corner structure of the scenery should be robustly constructed and if necessary reinforced with plywood plates, glued and screwed in place. The structure should be designed so that loads are evenly spread. The working load shown on the fitting does not imply that the structure it is fitted to can withstand the load.

**Safe Use** D Rings and Keepers are designed to allow either the direct attachment of hemp lines or for the attachment of wire ropes by use of an inverted US Fed Spec. bow shackle. The load may be applied at any angle so long as it is in axis with the body of the Keeper and so long as the D Ring and Shackle are free to articulate. Bridles may be employed in axis with the keeper but allowance must be made for the extra loads imposed both on the D Ring and Keeper and on the structure itself. Before applying a load ensure any shackles and rigging screws are correctly aligned. Care should be taken during flying to avoid shock loads which may arise due to wires becoming slack if a piece of scenery becomes caught on a fixed object while flying in.

**In Service Inspection and Maintenance** The fittings should be kept clean and free of corrosion. They must be inspected every six months or after any exceptional circumstance or according to an examination scheme drawn up by a competent person. Inspect for illegible markings, distortion, wear, stretched or bent strap iron and D Rings, nicks, gouges, cracks, corrosion, heat marks or any other defect. If in doubt replace the fitting or seek further advice.

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